OIPE

RAW SEQUENCE LISTING   DATE: 05/10/2004
PATENT APPLICATION: US/09/855,170A   TIME: 10:48:49

Input Set : N:\Crf3\RULE60\09855170A.RAW.txt
Output Set: N:\CRF4\05102004\I855170A.raw

```
      1 <110> APPLICANT: Lizardi, Paul M.
      2 <120> TITLE OF INVENTION: Artificial Long Terminal Repeat Vectors
      3 <130> FILE REFERENCE: YU 125
C-->  4 <140> CURRENT APPLICATION NUMBER: US/09/855,170A
      5 <141> CURRENT FILING DATE: 2001-05-14
      6 <150> PRIOR APPLICATION NUMBER: US/09/396,340
      7 <151> PRIOR FILING DATE: 1999-09-15
      8 <150> PRIOR APPLICATION NUMBER: 60/100,305
      9 <151> PRIOR FILING DATE: 1998-09-15
     10 <160> NUMBER OF SEQ ID NOS: 9
     11 <170> SOFTWARE: PatentIn Ver. 2.1
     13 <210> SEQ ID NO: 1
     14 <211> LENGTH: 64
     15 <212> TYPE: DNA
     16 <213> ORGANISM: Artificial Sequence
     17 <220> FEATURE:
     18 <223> OTHER INFORMATION: Description of Artificial Sequence: ALTR with
     19       identical repeats and identical linkers
W--> 20 <221> NAME/KEY: misc_feature
     21 <222> LOCATION: (25)..(27)
     22 <223> OTHER INFORMATION: Linker sequence where N represents A, G, C, or T
W--> 23 <221> misc_feature
     24 <222> LOCATION: (28)..(37)
     25 <223> OTHER INFORMATION: DNA insert where N represents A, G, C, or T
W--> 26 <221> misc_feature
     27 <222> LOCATION: (38)..(40)
     28 <223> OTHER INFORMATION: Linker Sequence where N represents A, G, C, or T
W--> 29 <400> 1
W--> 30       aggtaggtag gtaggtaggt aggtnnnnnn nnnnnnnnnn acctacctac ctacctacct 60
     31       acct                                                              64
     33 <210> SEQ ID NO: 2
     34 <211> LENGTH: 64
     35 <212> TYPE: DNA
     36 <213> ORGANISM: Artificial Sequence
     37 <220> FEATURE:
     38 <223> OTHER INFORMATION: Description of Artificial Sequence: ALTR with
     39       identical repeats and different linkers
W--> 40 <221> NAME/KEY: misc_feature
     41 <222> LOCATION: (25)..(27)
     42 <223> OTHER INFORMATION: Linker Sequence where N represents A, G, C, or T
W--> 43 <221> misc_feature
     44 <222> LOCATION: (28)..(37)
     45 <223> OTHER INFORMATION: DNA insert where N represents A, G, C, or T
```

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```
W--> 46 <221> misc_feature
     47 <222> LOCATION: (38)..(40)
     48 <223> OTHER INFORMATION: Linker Sequence where N represents A, G, C, or T
W--> 49 <400> 2
W--> 50       aggtaggtag gtaggtaggt aggtnnnnnn nnnnnnnnnn acctacctac ctacctacct 60
     51       acct                                                           64
     53 <210> SEQ ID NO: 3
     54 <211> LENGTH: 64
     55 <212> TYPE: DNA
     56 <213> ORGANISM: Artificial Sequence
     57 <220> FEATURE:
     58 <223> OTHER INFORMATION: Description of Artificial Sequence: ALTR with two
     59       types of ALTR repeats and different linkers
W--> 60 <221> NAME/KEY: misc_feature
     61 <222> LOCATION: (25)..(27)
     62 <223> OTHER INFORMATION: Linker Sequence where N represents A, G, C, or T
W--> 63 <221> misc_feature
     64 <222> LOCATION: (28)..(37)
     65 <223> OTHER INFORMATION: DNA insert where N represents A, G, C, or T
W--> 66 <221> misc_feature
     67 <222> LOCATION: (38)..(40)
     68 <223> OTHER INFORMATION: Linker Sequence where N represents A, G, C, or T
W--> 69 <400> 3
W--> 70       aggtaggtag gtaggtaggt aggtnnnnnn nnnnnnnnnn gatggatgga tggatggatg 60
     71       gatg                                                           64
     73 <210> SEQ ID NO: 4
     74 <211> LENGTH: 34
     75 <212> TYPE: DNA
     76 <213> ORGANISM: Artificial Sequence
     77 <220> FEATURE:
     78 <223> OTHER INFORMATION: Description of Artificial Sequence: Repeat A
     79 <400> SEQUENCE: 4
     80       acgcagctcg tgtaatacga ctcgcatgcc tccc                           34
     82 <210> SEQ ID NO: 5
     83 <211> LENGTH: 22
     84 <212> TYPE: DNA
     85 <213> ORGANISM: Artificial Sequence
     86 <220> FEATURE:
     87 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer A
     88 <400> SEQUENCE: 5
     89       cgcagctcgt gtaatacgac tc                                        22
     91 <210> SEQ ID NO: 6
     92 <211> LENGTH: 34
     93 <212> TYPE: DNA
     94 <213> ORGANISM: Artificial Sequence
     95 <220> FEATURE:
     96 <223> OTHER INFORMATION: Description of Artificial Sequence: Repeat B
     97 <400> SEQUENCE: 6
     98       atgcatgctc agtggtgctg agtaacagcc tggg                           34
```

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Input Set : **N:\Crf3\RULE60\09855170A.RAW.txt**
Output Set: **N:\CRF4\05102004\I855170A.raw**

```
100 <210> SEQ ID NO: 7
101 <211> LENGTH: 22
102 <212> TYPE: DNA
103 <213> ORGANISM: Artificial Sequence
104 <220> FEATURE:
105 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer B
106 <400> SEQUENCE: 7
107      ggctgttact cagcaccact ga                                        22
109 <210> SEQ ID NO: 8
110 <211> LENGTH: 75
111 <212> TYPE: DNA
112 <213> ORGANISM: Artificial Sequence
113 <220> FEATURE:
114 <223> OTHER INFORMATION: Description of Artificial Sequence: Left side of
115      ALTR vector
```
W--> 116 **<221> NAME/KEY: misc_feature**
```
117 <222> LOCATION: (69)..(75)
118 <223> OTHER INFORMATION: Insert and polylinker sequences where N represents
119      A, G, C, or T
```
W--> 120 **<400> 8**
```
121      acgcagctcg tgtaatacga ctcgcatgcc tcccacgcag ctcgtgtaat acgactcgca 60
```
W--> 122   **tgcctcccnn nnnnn   75**
```
124 <210> SEQ ID NO: 9
125 <211> LENGTH: 75
126 <212> TYPE: DNA
127 <213> ORGANISM: Artificial Sequence
128 <220> FEATURE:
129 <223> OTHER INFORMATION: Description of Artificial Sequence: Right side of
130      ALTR vector
```
W--> 131 **<221> NAME/KEY: misc_feature**
```
132 <222> LOCATION: (1)..(7)
133 <223> OTHER INFORMATION: Insert and Polylinker Sequences where N represents
134      A, G, C, or T
```
W--> 135 **<400> 9**
W--> 136   **nnnnnnnggg atgcatgctc agtggtgctg agtaacagcc tgggatgcat gctcagtggt 60**
```
137      gctgagtaac agcct                                               75
```

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 05/10/2004
PATENT APPLICATION: **US/09/855,170A**   TIME: 10:48:50

Input Set : **N:\Crf3\RULE60\09855170A.RAW.txt**
Output Set: **N:\CRF4\05102004\I855170A.raw**

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40
Seq#:2; N Pos. 25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40
Seq#:3; N Pos. 25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40
Seq#:8; N Pos. 69,70,71,72,73,74,75
Seq#:9; N Pos. 1,2,3,4,5,6,7

VERIFICATION SUMMARY   DATE: 05/10/2004
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Input Set : **N:\Crf3\RULE60\09855170A.RAW.txt**
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L:4 M:270 C: Current Application Number differs, Wrong Format
L:20 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:23 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:26 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:29 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:30 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:40 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:43 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2
L:46 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2
L:49 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2
L:50 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
L:60 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:63 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
L:66 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
L:69 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
L:70 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:116 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:120 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:8
L:122 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:60
L:131 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:135 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:9
L:136 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0